3737-90002

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December 17, 1992

Mr. Andy Lincoff
U.S. Environmental Protection Agency
Mail Code H-6-3
75 Hawthorne St.
San Francisco, CA

Dear Andy,

The following are responses to comments on the draft work plan for the RI/FS of Marine Sediment at the United Heckathorn Superfund Site. Comments were received from San Francisco Bay Conservation and Development Commission (BCDC), State of California EPA, and USEPA. I have also addressed concerns raised at the November 19 meeting with USEPA, Battelle, and representatives of state regulatory agencies.

Response to comments by Steven Goldbeck of the BCDC in a letter to Andy Lincoff dated 11/3/92:

BCDC expressed the following major concerns about the work plan: 1) the remedial alternatives identified in the work plan all involve disposal of the material in San Francisco Bay, and do not include upland disposal alternatives; and 2) the proposed sediment transport modelling may not provide useful information without a large expenditure of time and money. The work plan for the feasibility study has been revised to include the consideration of potential upland disposal options. The sediment transport modelling task has been deleted from the work plan because it is generally agreed that the no-action alternative is not acceptable for the site, and the level of effort required to provide an accurate sediment transport model for the site is not warranted.

Response to comments by James Policini of the State of California EPA in a memorandum to Barbara Cook dated 11/6/92:

Most of the comments in this memorandum address the adequacy of the work plan in terms of ecological risk assessment. The risk assessment for the United Heckathorn site is being conducted by EPA; therefore, the EPA project manager has responded to these comments.

Response to Comments on the Field Sampling Plan by David Taylor of ICF Technology Inc. in a memorandum to Andy Lincoff dated 11/19/92:

Major Concerns:

1. The text has been revised to state that the only preservation requirement for the sediment samples is refrigeration. In Section 3.0, it states that the samples will be stored in a freezer on the deck of the barge until the end of the sampling day, when they will be transferred to a refrigerated van maintained at 4°C ± 2°C.

   There is no simple way to measure the pH of sediment samples in the field, and the samples for chemical analysis will be encased in a lexan liner. This information is not important to the objectives of the sampling. Therefore, the pH of the samples will not be measured.

2. A table listing the holding times for all samples has been added to Section 4.0.

Minor Concerns:

1. A diagram of the core sampler has been added to section 3.1.

Response to comments on the Toxicological Testing Plan by Amy Wagner of EPA in a memorandum to Andy Lincoff dated 11/19/92:

1. All SOPs referenced in the Toxicological Testing Plan have been submitted for review as an appendix to the Quality Assurance Project Plan (QAPP).

2. The subsample of YBM material from the entire length of selected cores will be screened for the presence of contaminants other than pesticides (metals, PAHs, butyltins, PCBs, oil and grease, TPH).

3. The text now states that methylene chloride will be used as a solvent rinse. An acid rinse will not be performed because we are using stainless steel bowls and utensils to mix sediment.

4a. The text has been revised to provide a more detailed description of brine preparation.

4b. Experience at MSL has shown that when deionized water is used to reduce salinity, it causes a significant pH shift in the water sample. Tap water has proven to be more appropriate. MSL tap water, which comes from a deep well and is not chlorinated, has been chemically analyzed.

4c. The text has been revised to clearly specify deviations from the SPP SOP.

5. The echinoderm toxicity test is a back-up test in the event that bivalves cannot be used. Deviations from the bivalve toxicity test SOP will be documented in the event that echinoderms must be used. Deviations from the existing SOP include animal preparation (spawning procedures) and test conditions (summarized in Section 8.2, page 17).

Response to comments by Amy Wagner on the Quality Assurance Project Plan:

1. Hold times for sediments and SPPs prior to toxicity tests have been added to Section 6.3.

2. The suggested changes to Table 6.1 have been made.

Response to comments on the Quality Assurance Project Plan by David Taylor of ICF Technology Inc. to Andy Lincoff in a memorandum dated 11/19/92:

Major Concerns:

1. Section 5.1 has been revised to show that the Analytical Chemistry Task Leader and the Quality Control Engineer will be responsible for review and oversight of the quality of the data generated from the chemical and biological analyses.

2. Data quality objectives for each analyte for multi-analyte methods are not provided because the acceptance criteria are the same for all compounds. The QAPP has been revised to identify the surrogate and matrix spike compounds for PAH, PCB, butyltin, and pesticide analyses.

2A. The SOPs for all analyses that deviate from standard EPA protocols have been provided in an appendix to the QAPP, except the SOP for the analysis of metals and trace elements in solid samples by ICP/MS. This SOP is in preparation and will be submitted for review prior to the analysis of tissue samples.

2B. This reference for this method has been changed from 8290 to Bligh and Dyer.

2C. The SOPs for these analyses have been provided in an appendix to the QAPP.

2D. These SOPs have been appended to the QAPP.

2E. Procedures for the preparation of tissue samples are described in the Sediment Bioaccumulation SOP, which is provided in the appendix to the QAPP. SOPs for the extraction of tissue samples for inorganic and organic analyses are also included in the appendix to the QAPP.

2F. The text of the QAPP has been revised to discuss procedures used to achieve low detection limits for metals in sediment and water samples.

2G. The text of the QAPP has been revised to discuss procedures used to achieve low detection limits for pesticides in sediment and water samples.

2H. The text of the QAPP has been revised to discuss procedures used to achieve low detection limits for PAHs in sediment and water samples.

3. Section 6.3 has been revised to identify holding times from the time of sample collection.

4. Section 7.2 has been revised to state that the analytical laboratory will be informed of the nature of the sample matrix.

5. The calibration procedures for each proposed method are documented in SOPs, which are appended to the QAPP.

6. Batch comparisons will not be performed in this study, and all references to the comparability criteria have been deleted. The text of the QAPP has been revised to describe the blank correction system for metals.

Minor Concerns:

1. The comparability measurement in question has been deleted.

Response to comments raised in 11/19/92 meeting with EPA, Battelle, and representatives of state agencies:

The major concern raised at this meeting was the lack of knowledge about the distribution of contaminated sediment at the edges of the channels in Inner Richmond Harbor. It would be difficult or impossible to remove sediment from the channel edges, and any contaminated sediment left in place may continue to adversely impact the environment. It is difficult to sample sediment along the edges of the channels because channel banks are generally armored with rip rap or sheetpile. The work plan has been revised to include a shoreline reconnaissance in Inner Harbor Channel, Santa Fe Channel, Lauritzen Canal, and Parr Canal. The survey will involve observation and documentation of the nature of the channel banks and will determine the feasibility of sampling the channel edges. If suitable sites are identified during the survey, grab samples of sediment will be collected.

Another concern raised at the meeting was the low density of sampling stations in Inner Harbor Channel. If contaminant concentrations in Inner Harbor Channel exceed the action level, it would be difficult to estimate the

volume of sediment to be removed based on the nine existing sampling stations. As a result, four new sampling stations were added to Inner Harbor Channel. Other adjustments in sampling station locations were also made.

The SOPs cited in the Toxicological Testing Plan and the QAPP have been submitted to Hedy Ficklin of the USEPA Quality Assurance Management Section. The revised Work Plan, Field Sampling Plan, Toxicological Testing Plan, and QAPP will be submitted to USEPA on Tuesday, December 22nd. Please call if you have any questions.

Sincerely,

Patty

Patty White
Research Scientist

cc: H. Ficklin
J. Word
R. Cuello